IN THE SPECIFICATION

Please amend the paragraph at page 2, lines 8-17, as follows:

An example of such approximation method will be described with reference to FIG. 1. Power transmission impedance constant up to a fault point F will be considered with reference to FIG. 1. Voltage and current of a protection relay installation point A are assumed to be v and i when resistance is R and inductance is L. If it is assumed that the voltage at the ~~faultal~~ fault point F is zero, differential equation of a power transmission line 2 can be expressed in an expression (1).

Please amend the paragraphs at page 5, line 6, to page 7, line 15, as follows:

A protection relay for determining whether or not a ~~faultal~~ fault point of a power system exists in a predetermined range, according to a first aspect of the present invention ~~is characterized by comprising:~~ includes a filter [[means]] for inputting sampling data of a voltage and a current in the power system to a digital filter having a predetermined transfer function and outputting a first voltage data and a first current data, and a second voltage data and a second current data normal to the first voltage data and the first current data, respectively; a calculation [[means]] device for calculating a predetermined measurement value based on the first voltage data, the first current data, the second voltage data and the second current data at a first time and the first voltage data, the first current data, the second voltage data and the second current data at a second time different from the first time; and an operation decision [[means]] device for performing an operation decision based on the predetermined measurement value obtained by the calculation [[means]] device.

A protection relay for determining whether or not a ~~faultal~~ fault point of a power system exists in a predetermined range, according to a second aspect of the present invention

~~is characterized by comprising:~~ includes a filter [[means]] in which sampling data of voltage

and current in the power system is inputted to a predetermined transfer function so as to

output first voltage data and first current data and second voltage data and second current

data normal to the first voltage data and the first current data, respectively; a polarized

voltage value calculation [[means]] device for inputting the first and second voltage data and

the first and second current data so as to calculate a third voltage normal to the first voltage;

and an operation decision [[means]] device for performing an operation decision based on the

third voltage.

A protection relay for determining whether or not a ~~faultal~~ fault point of power system

exists in a predetermined range, according to a third aspect of the present invention ~~is~~

~~characterized by comprising:~~ includes a first filter [[means]] for inputting sampling data v_m

and i_m of voltage a v and a current i in the power system to a digital filter having transfer

function $f(Z) \cdot (1+k \cdot Z^{-1}+Z^{-2})$ (Z indicates a Z conversion operator) so as to output voltage data

v_{sm} and current data i_{sm}; a second filter [[means]] in which the sampling data v_m, i_m are

inputted to a digital filter having transfer function $f(Z) \cdot (1-Z^{-2})$ (Z indicates a Z conversion

operator) so as to output voltage data v_{jm} and current data i_{jm} normal to the voltage data v_{sm}

and current data i_{sm}; a charging current compensation calculation [[means]] device for

calculating quantity of electricity defined in $i_{sm}-C \cdot v_{jm}$ by the current data i_{sm}, the voltage data

v_{jm}, and a setting value C_s at time t_m; a transmission and reception [[means]] device for

transmitting an output of the charging current compensation calculation [[means]] device to

an opposite terminal and when quantity of electricity at the opposite terminal is assumed to

be B, receiving quantity of electricity defined by $(i_{sm}-C \cdot v_{jm})B$ at the opposite terminal; and an

operation decision [[means]] device for performing an operation decision based on outputs

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from the charging current compensation calculation [[means]] <u>device</u> and the

transmission/reception [[means]] <u>device</u> according to the following expression:

Please amend the paragraph on page 15, lines 8-15, as follows:

The reactance value calculator 3 of FIG. 4 calculates a reactance value from a

protection relay installation point in a power transmission line of FIG. 1 up to a ~~faultal~~ <u>fault</u>

point according to the expression (17). Assuming that the input voltage and current are $i =$

$I \cdot \sin(\omega t)$, and $v = V \cdot \sin(\omega t + \theta)$, the expression (17) can be expressed in the expression (15).

IN THE ABSTRACT

Please amend the abstract on page 38, lines 2-18, as follows:

A protection relay for determining whether or not a ~~faultal~~ <u>fault</u> point of a power

system exists in a predetermined range, ~~comprises~~ <u>including a</u> filter section for inputting

sampling data of a voltage and a current in the power system to a digital filter having a

predetermined transfer function and outputting a first voltage data and a first current data, and

a second voltage data and a second current data normal to the first voltage data and the first

current data, respectively, <u>a</u> calculator for calculating a predetermined measurement value

based on the first and second voltage data, and the first and second current data at a first time

and the first and second voltage data, and the first and second current data at a second time

different from the first time, and <u>an</u> operation decision section for performing an operation

decision based on the predetermined measurement value obtained by the calculator.